

Former Electrolux Manufacturing Facility
Jefferson, Iowa

Letter Report dated May 13, 2011

Comments from Bill Ferguson, Corps of Engineers

8-75-11

1. General Comment: A total of 25 borings were advanced to a maximum depth of 35 feet (GP-02/MW-02). A detailed review of the boring logs provided in the report was performed. A distinct wet (saturated) zone (or zones) was observed in only 8 of the 25 borings (GP-01, GP-02/MW-1, MW-14, MW-16, MW-20, MW-21A, MW-22, and MW-23). The zone or zones of saturation generally occur in thin sand/sandy clay lenses that are overlain and underlain by zones of lower permeability material with little moisture content. No free water was observed in 10 of the borings (GP-10/MW-09, MW-10, MW-11, MW-12, MW-13, MW-15, MW-17, MW-18, MW-19, and MW-21). The conditions described above indicate that the wells are installed in the vadose zone rather than within the saturated zone. The water that accumulates within the wells is coming from either perched water zones or from the moisture within the soil.

A deeper exploratory boring (or borings) appears to be needed to establish the depth at which the water table is encountered at the site. Wells that intercept the water table will then need to be installed to assess the impact to groundwater from site activities. A review of the well records database (GEOSAM) maintained by the Iowa Geological Survey indicates that the glacial drift aquifer is used extensively as a water supply for both domestic and livestock purposes in the vicinity of the facility. The City of Jefferson municipal wells are completed in the glacial drift aquifer.

2. Figure 4 – Phreatic Surface Map. The elevations provided on the figure are not representative of the phreatic surface for the reasons provided in general comment 1 above.

